

### **CLAIMS**

1. A method of dynamically routing data between a first location and a second location, the method comprising:

obtaining an attempt failure ratio for each of a plurality of data paths capable of providing a data link between the first location and the second location, the attempt failure ratio for each data path being representative of a proportion of failed linkages by the data path to all attempted linkages by the data path between the first location and the second location;

obtaining a revenue value for each of the plurality of data paths, the revenue value for each data path being representative of an amount per unit generated by a successful linkage by the data path between the first location and the second location;

computing a comparative income value for each of the plurality of data paths, the comparative income value for each data path being a product of the attempt failure ratio for the data path and the revenue value for the data path; and

selecting routing information for routing the data between the first location and the second location based on the comparative income value for each of the data paths, wherein the routing information may be employed to route the data by way of at least one of the data paths.

2. The method of claim 1 for dynamically routing a telephone call between a first location and a second location, the method comprising:

obtaining an attempt failure ratio for each of a plurality of telephone paths capable of providing a telephone link between the first location and the second location, the attempt failure ratio for each telephone path being representative of a proportion of failed linkages by the telephone path to all

attempted linkages by the telephone path between the first location and the second location;

obtaining a revenue value for each of the plurality of telephone paths, the revenue value for each telephone path being representative of an amount per unit generated by a successful linkage by the telephone path between the first location and the second location;

computing a comparative income value for each of the plurality of telephone paths, the comparative income value for each telephone path being a product of the attempt failure ratio for the telephone path and the revenue value for the telephone path;

selecting routing information for routing the telephone call between the first location and the second location based on the comparative income value for each of the telephone paths, wherein the routing information may be employed to route the telephone call by way of at least one of the telephone paths.

3. The method of claim 2 further comprising:

transmitting the routing information to a central office; and  
routing the telephone call at the central office according to the transmitted routing information.

4. The method of claim 2 for dynamically routing a telephone call between a first location and a second location, the method comprising:

obtaining an attempt failure ratio for each of a plurality of trunk lines capable of providing a telephone link between the first location and the second location, the attempt failure ratio for each trunk line being representative of a proportion of failed linkages by the trunk line to all attempted linkages by the trunk line between the first location and the second location;

obtaining a revenue value for each of the plurality of trunk lines, the revenue value for each trunk line being representative of an amount per unit generated by a successful linkage by the trunk line between the first location and the second location;

computing a comparative income value for each of the plurality of trunk lines, the comparative income value for each trunk line being a product of the attempt failure ratio for the trunk line and the revenue value for the trunk line;

selecting routing information for routing the telephone call between the first location and the second location based on the comparative income value for each of the trunk lines, wherein the routing information may be employed to route the telephone call by way of at least one of the trunk lines.

5. The method of claim 1, wherein obtaining the revenue value for each of a plurality of data paths comprises obtaining a value selected from a group consisting of least cost per minute, most revenue per minute and most profit per minute.

6. The method of claim 1 further comprising:  
transmitting the routing information to a routing device; and  
routing the data at the routing device according to the transmitted routing information.

7. The method of claim 1, the method comprising obtaining both the attempt failure ratio and the revenue value for each data path from a database.

8. The method of claim 7, the method further comprising storing the comparative income value for each data path in the database.

9. The method of claim 7 further comprising updating the database periodically with a current attempt failure ratio for each data path and a current revenue value for each data path.

10. The method of claim 9, comprising updating the database periodically with the current attempt failure ratio for each data path and the current

revenue value for each data path as obtained from a surveillance system that monitors such current attempt failure ratio and such current revenue value.

11. The method of claim 1, wherein selecting the routing information further comprises:

selecting a first routing information for routing the data by way of a first data path; and

selecting a second routing information for routing the data by way of a second data path.

12. The method of claim 11, comprising:

selecting the first routing information for routing the data by way of a preferred data path; and

selecting a second routing information for routing the data by way of an alternative data path.

13. A computer having instructions thereon for dynamically routing data between a first location and a second location, the instructions being organized into modules comprising:

a first module for obtaining an attempt failure ratio for each of a plurality of data paths capable of providing a data link between the first location and the second location, the attempt failure ratio for each data path being representative of a proportion of failed linkages by the data path to all attempted linkages by the data path between the first location and the second location;

a second module for obtaining a revenue value for each of the plurality of data paths, the revenue value for each data path being representative of an amount per unit generated by a successful linkage by the data path between the first location and the second location;

a third module for computing a comparative income value for each of the plurality of data paths, the comparative income value for each data path being a product of the attempt failure ratio for the data path and the revenue value for the data path; and

a fourth module for selecting routing information for routing the data between the first location and the second location based on the comparative income value for each of the data paths, wherein the routing information may be employed to route the data by way of at least one of the data paths.

14. The computer of claim 13 for dynamically routing a telephone call between a first location and a second location, the computer comprising:

a first module for obtaining an attempt failure ratio for each of a plurality of telephone paths capable of providing a telephone link between the first location and the second location, the attempt failure ratio for each telephone path being representative of a proportion of failed linkages by the telephone path to all attempted linkages by the telephone path between the first location and the second location;

a second module for obtaining a revenue value for each of the plurality of telephone paths, the revenue value for each telephone path being representative of an amount per unit generated by a successful linkage by the telephone path between the first location and the second location;

a third module for computing a comparative income value for each of the plurality of telephone paths, the comparative income value for each telephone path being a product of the attempt failure ratio for the telephone path and the revenue value for the telephone path; and

a fourth module for selecting routing information for routing the telephone call between the first location and the second location based on the comparative income value for each of the telephone paths, wherein the routing information may be employed to route the telephone call by way of at least one of the telephone paths.

15. The computer of claim 14 for dynamically routing a telephone call between a first location and a second location, the computer comprising:

a first module for obtaining an attempt failure ratio for each of a plurality of trunk lines capable of providing a telephone link between the first

location and the second location, the attempt failure ratio for each trunk line being representative of a proportion of failed linkages by the trunk line to all attempted linkages by the trunk line between the first location and the second location;

a second module for obtaining a revenue value for each of the plurality of trunk lines, the revenue value for each trunk line being representative of an amount per unit generated by a successful linkage by the trunk line between the first location and the second location;

a third module for computing a comparative income value for each of the plurality of trunk lines, the comparative income value for each trunk line being a product of the attempt failure ratio for the trunk line and the revenue value for the trunk line; and

a fourth module for selecting routing information for routing the telephone call between the first location and the second location based on the comparative income value for each of the trunk lines, wherein the routing information may be employed to route the telephone call by way of at least one of the trunk lines.

16. The computer of claim 13, wherein the second module for obtaining the revenue value for each of a plurality of data paths comprises obtaining a value selected from a group consisting of least cost per minute, most revenue per minute and most profit per minute.

17. The computer of claim 13 further comprising a module for transmitting the routing information to a routing device, wherein the routing device may route the data according to the transmitted routing information.

18. The computer of claim 13 wherein the first module and the second module obtain the attempt failure ratio and the revenue value for each data path from a database.

19. The computer of claim 18 further comprising a module for storing the comparative income value for each data path in the database.

20. The computer of claim 18 wherein the first module and the second module obtain the attempt failure ratio and the revenue value for each data path from a database that is periodically updated with a current attempt failure ratio for each data path and a current revenue value for each data path.

21. The computer of claim 20, wherein the first module and the second module obtain the attempt failure ratio and the revenue value for each data path from a database that is periodically updated with a current attempt failure ratio for each data path and a current revenue value for each data path as obtained from a surveillance system that monitors such current attempt failure ratio and such current revenue value.

22. The computer of claim 13 wherein the fourth module selects the routing information by selecting a first routing information for routing the data by way of a first data path; and then selecting a second routing information for routing the data by way of a second data path.

23. The computer of claim 22, wherein the fourth module selects the first routing information for routing the data by way of a preferred data path; and selects a second routing information for routing the data by way of an alternative data path.